

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (Withdrawn) A flame retarder to be contained in a resin composition to confer flame retardant properties on said resin composition, said flame retarder comprising:

an acrylonitrile- styrene based polymer containing at least acrylonitrile and styrene; wherein said acrylonitrile- styrene based polymer is sulfonated with a sulfonating agent containing less than 3 wt% of moisture, whereby sulfonic acid groups and/or sulfonate groups have been introduced into said acrylonitrile- styrene based polymer.

2. (Withdrawn) The flame retarder according to claim 1 containing sulfur components of said sulfonic acid groups and/or sulfonate groups in a range from 0.001 wt% to 16 wt%.

3. (Withdrawn) The flame retarder according to claim 1 wherein said sulfonating agent is one or more selected from the group consisting of sulfuric anhydride, fuming sulfuric acid, chlorosulfonic acid and polyalkylbenzene sulfonic acid.

4. (Withdrawn) The flame retarder according to claim 1 wherein said acrylonitrile- styrene based polymer is redeemed resin originally produced for specified purposes and/or used up.

5. (Withdrawn) A flame retardant resin composition containing a flame retarder to confer flame retardant properties on the resin composition, wherein

said flame retarder includes an acrylonitrile- styrene based polymer containing at least acrylonitrile and styrene; wherein

said acrylonitrile- styrene based polymer is sulfonated with a sulfonating agent containing less than 3 wt% of moisture, whereby sulfonic acid groups and/or sulfonate groups have been introduced into said acrylonitrile- styrene based polymer.

6. (Withdrawn) The flame retardant resin composition according to claim 5 wherein said flame retarder contains sulfur components of said sulfonic acid groups and/or sulfonate groups in a range from 0.001 wt% to 16 wt%.

7. (Withdrawn) The flame retardant resin composition according to claim 5 wherein said sulfonating agent is one or more selected from the group consisting of sulfuric anhydride, fuming sulfuric acid, chlorosulfonic acid and polyalkylbenzene sulfonic acid.

8. (Withdrawn) The flame retardant resin composition according to claim 5 wherein said resin composition contains not less than 3 wt% of one or more of polycarbonate, an acrylonitrile-butadiene-styrene copolymer, polystyrene, an acrylonitrile-styrene copolymer, polyvinyl chloride, polyphenylene oxide, polyethylene terephthalate, polybutylene terephthalate, polysulfone, thermoplastic elastomer, polybutadiene, polyisoprene, an acrylonitrile-butadiene rubber and nylon.

9. (Withdrawn) The flame retardant resin composition according to claim 5 wherein said said resin composition and/or said acrylonitrile-styrene based polymer is redeemed resin originally produced for specified purposes and/or used up.

10. (Withdrawn) The flame retardant resin composition according to claim 5 wherein a fluoro olefin resin is contained as an anti-drip agent.

11. (Withdrawn) A method for producing a flame retarder to be contained in a resin composition to confer flame retardant properties on said resin composition, comprising

sulfonating an acrylonitrile-styrene based polymer, containing at least acrylonitrile and styrene, with a sulfonating agent containing less than 3 wt% of moisture, for introducing sulfonic acid groups and/or sulfonate groups into said acrylonitrile-styrene based polymer.

12. (Withdrawn) The method for producing a flame retarder according to claim 11 wherein said sulfonating agent is one or more selected from the group consisting of sulfuric anhydride, fuming sulfuric acid, chlorosulfonic acid and polyalkylbenzene sulfonic acid.

13. (Withdrawn) The method for producing a flame retarder according to claim 11 wherein redeemed resin originally produced for specified purposes and/or used up is used as said acrylonitrile- styrene based polymer.

14. (Withdrawn) A method for producing a flame retarder to be contained in a resin composition to confer flame retardant properties on said resin composition, comprising:

reacting a powdered acrylonitrile- styrene based polymer, containing at least acrylonitrile and styrene, with an SO₃ gas for performing sulfonating processing for introducing sulfonic acid groups and/or sulfonate groups into said acrylonitrile- styrene based polymer.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Previously Presented) The flame retarder according to claim 17 wherein said sulfonating agent is one or more selected from the group consisting of sulfuric anhydride, fuming sulfuric acid, chlorosulfonic acid and polyalkylbenzene sulfonic acid.

20. (Original) The flame retarder according to claim 15 wherein said aromatic polymer is a redeemed resin originally produced for specified purposes and/or used up.

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Currently Amended) A resin composition having flame retardant properties n,

wherein:

the flame retarder includes an aromatic polymer containing monomer units having aromatic skeletons ranging between 1 mol% and 100 mol%,

~~sulfonic acid groups and/or sulfonate groups have been substituted at a sulfonation rate of 0.01% to 10% onto the aromatic polymer, and~~

sulfonic acid groups and/or sulfonate groups are introduced in an amount ranging between 0.10 ~~molt % to 8.0 mol %~~ 0.01 mol% and 14.9 mol% ~~into the aromatic polymer.~~

31. (Original) The flame retarder according to claim 30 wherein said aromatic polymer has an aromatic skeleton in a side chain and contains at least one or more of polystyrene, a styrene- butadiene copolymer (high impact polystyrene), an acrylonitrile- styrene copolymer, an acrylonitrile- butadiene- styrene copolymer, an acrylonitrile- chlorinated polyethylene- styrene resin, an acrylonitrile- styrene- acrylate copolymer, an acrylonitrile- ethylene- propylene rubber- styrene copolymer and an acrylonitrile- ethylene- propylene- diene- styrene resin.

32. (Original) The flame retarder according to claim 31 wherein said aromatic polymer has a weight average molecular weight ranging between 10000 and 10000000.

33. (Original) The flame retarder according to claim 30 wherein said aromatic polymer has an aromatic skeleton in a main chain thereof and is at least one or more of polycarbonate, polyphenylene oxide, polyethylene terephthalate, polybutylene terephthalate and polysulfone.

34. (Cancelled)

35. (Previously Presented) The flame retarder according to claim 30 wherein a sulfonating agent is used and said sulfonating agent one or more selected from the group consisting of sulfuric anhydride, fuming sulfuric acid, chlorosulfonic acid and polyalkylbenzene sulfonic acid.

36. (Original) The flame retarder according to claim 30 wherein said aromatic polymer is redeemed resin originally produced for specified purposes and/or used up.

37. (Currently Amended) A resin composition having flame retardant properties,
wherein:

the resin composition includes an aromatic polymer containing monomer units having aromatic skeletons ranging between 1 mol% and 100 mol%,

sulfonic acid groups and/or sulfonate groups are introduced in an amount ranging from
~~have been substituted at a sulfonation rate of 0.01% to 10%~~ 0.1 mol % to 8.0 mol% ~~onto the~~
aromatic polymer ~~in an amount ranging between 0.01 mol% and 14.9 mol%.~~

38. (Original) The flame retardant resin composition according to claim 37 wherein said aromatic polymer has an aromatic skeleton in a side chain and contains at least one or more of polystyrene, a styrene- butadiene copolymer (high impact polystyrene), an acrylonitrile- styrene

copolymer, an acrylonitrile- butadiene- styrene copolymer, an acrylonitrile- chlorinated polyethylene- styrene resin, an acrylonitrile- styrene- acrylate copolymer, an acrylonitrile- ethylene- propylene rubber- styrene copolymer and an acrylonitrile- ethylene- propylene- diene- styrene resin.

39. (Original) The flame retardant resin composition according to claim 38 wherein said aromatic polymer has a weight average molecular weight ranging between 10000 and 10000000.

40. (Original) The flame retardant resin composition according to claim 37 wherein said aromatic polymer has an aromatic skeleton in a main chain thereof and is at least one or more of polycarbonate, polyphenylene oxide, polyethylene terephthalate, polybutylene terephthalate and polysulfone.

41. (Cancelled)

42. (Previously Presented) The flame retardant resin composition according to claim 37 wherein a sulfonating agent is used and said sulfonating agent is one or more selected from the group consisting of sulfuric anhydride, fuming sulfuric acid, chlorosulfonic acid and polyalkylbenzene sulfonic acid.

43. (Original) The flame retardant resin composition according to claim 37 wherein not less than 5 wt% of one or more of polycarbonate, an acrylonitrile- butadiene- styrene copolymer, polystyrene, an acrylonitrile- styrene copolymer, polyvinyl chloride, polyphenylene oxide, polyethylene terephthalate, polybutylene butylate, polysulfone, a thermoplastic elastomer, polybutadiene, polyisoprene, acrylonitrile- butadiene rubber and nylon is contained in the composition.

44. (Original) The flame retardant resin composition according to claim 37 wherein said resin composition and/or said aromatic polymer is redeemed resin originally produced for specified purposes and/or used up.

45. (Previously Presented) The flame retardant resin composition according to claim 37 further comprising a fluoro olefin resin as an anti-drip agent.